The FRASCA 122

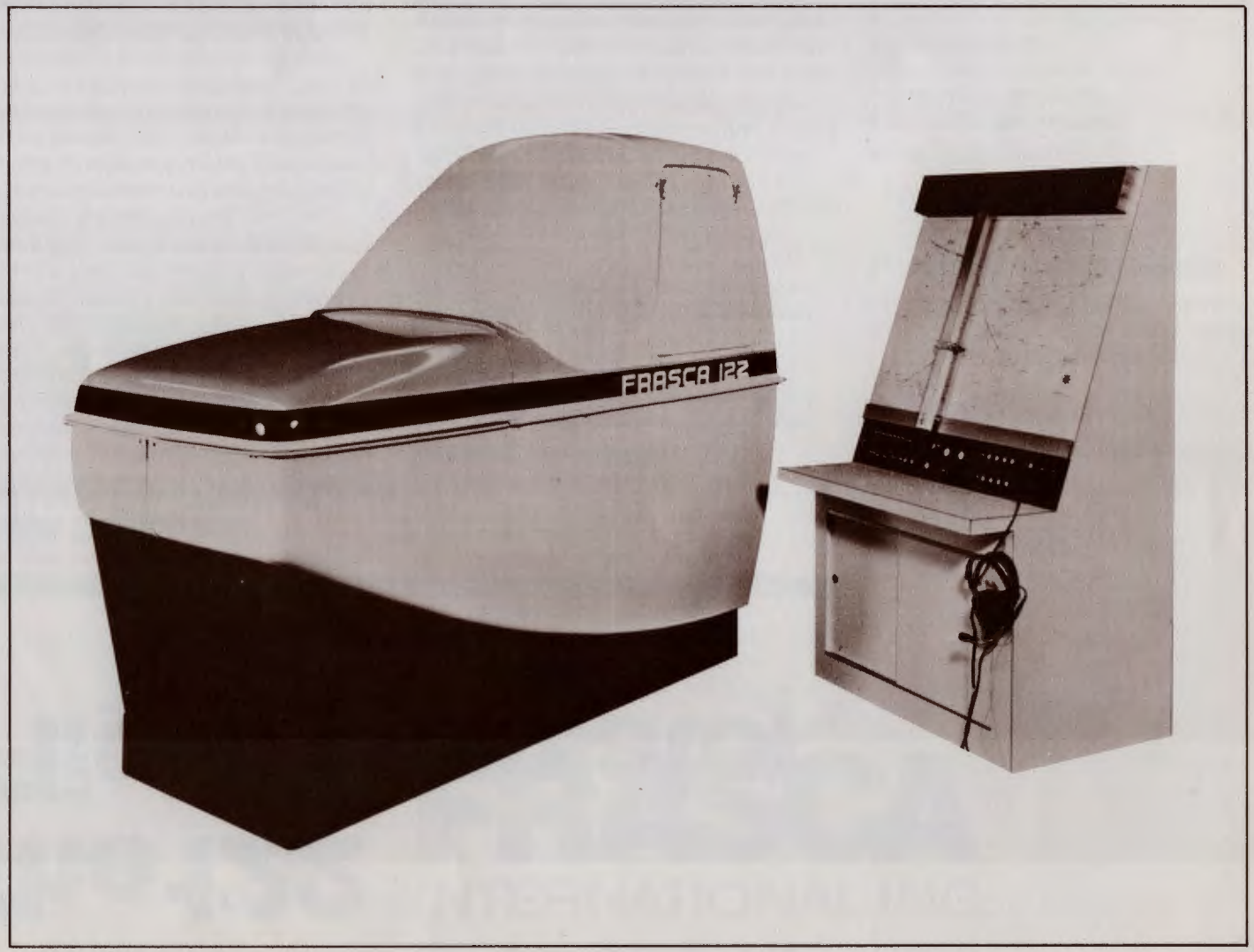
lets you train a better pilot while you turn a better profit . . .

The Frasca 122 is our low-cost general-purpose twin engine flight simulator. Frasca simulators have become the first choice of flight schools, corporations, and governments in over 40 countries.

With the price of aviation fuel at back-breaking highs and climbing, and with other direct operating costs equally insensitive to your net profit, flight simulation is the only way to go. And when it comes to efficient flight simulation, nobody beats Frasca.

A Frasca 122 lets you train student pilots quickly, or keep your senior pilots sharp. The 122, like any Frasca simulator, realistically provides instrument flight conditions, so you can focus instruction directly on student needs. The result is what Frasca is all about . . . efficient flight instruction.

The Frasca 122 is not only affordable today, it's also worth more when it's time to sell. With all of that quality and value, you simply can't afford to settle for less than a Frasca.



The 122 Flight Simulator

Instrument Panel

The instrument panel of the Frasca 122 accurately reproduces the cockpit environment of a general aviation twin engine airplane. Here's a list of our standard features:

- Airspeed indicator
- Attitude indicator
- Altimeter (three-needle sensitive, with barometric adjustment)
- Turn coordinator
- Directional gyro
- Vertical speed indicator
- Dual needle engine tachometer
- Dual needle manifold pressure gauge
- 8-day clock
- Hobbs meter
- Fuel quantity gauge, left & right
- Fuel pressure gauge, left & right
- Cylinder head temperature gauge, left & right
- Engine oil pressure gauge, left & right
- Master switch
- Fuel selector switch
- Autopilot (attitude freeze)
- Pitot heat switch
- Elevator trim indicator
- Flap selector
- Landing gear selector
- Parking brake control
- Headphone jack
- Microphone jack
- Alternator warning lights, left & right
- Alternator on/off switches, left & right
- Dual magnetos, left & right
- Start, left & right
- Fuel boost pumps, left & right
- Audio control panel (with marker lights)
- NAV 1/course deviation indicator (with glide slope)
- NAV 2/course deviation indicator
- ADF tuner
- RMI
- NAV/COMM 1 tuner
- NAV/COMM 2 tuner
- Transponder
- Digital DME

Flight Computer Performance Capabilities

The Frasca 122 is one of our flight simulators featuring a computer system unduplicated in the industry . . . so unique and flexible that no other system even comes close. It's based on state-of-the-art, high-speed systems. And while it delivers more of the capability you need in a flight simulator, it's simple in design. That means easier maintenance and lower operating costs.

But the real measure of any flight simulator is accurate instrument performance. You sense accuracy during start-up and taxi maneuvers. Take-offs and landings are realistic too. But that's only the beginning.

With the Frasca New Generation Flight Computer, control response varies with airspeed, all the way down to minimum controllable airspeed, just as it would in actual flight. Stalls are accurately simulated, with stall speed varying according to angle of bank and degree of flap extension.

Once aloft, elevator trim neutralizes control pressure. For any given angle of bank, rate of turn is inversely proportional to airspeed. Flight on the back side of the power curve is realistic. Changes in gross weight and center of gravity (manipulated from the instructor's console) affect flight response and stability.

True airspeed and total performance are sensitive to altitude. And, unlike many systems, the Frasca system computes total thrust based on manifold pressure and RPM taken together.

The 122 is also extremely effective in teaching single engine flight. The instructor can kill either engine without notice, or can gradually take out an engine, perhaps by slowly raising cylinder head temperature while decreasing oil pressure, to test the pilot's response. Once the pilot loses an engine, opposite rudder pressure must be applied, along with proper back pressure, to compensate for loss of airspeed, plus slight aileron opposite the dead engine to maintain straight and level flight. Once straight and level flight is reinstituted, the 122 can be trimmed to relieve control pressures. All pressures and responses accurately represent the feel of a real twin with an engine out. The difference in drag between a feathered prop and a windmilling prop is represented. Restart procedures are the same. With both engines out, the student can deadstick the trainer to a landing or leave the props windmilling.

Also included is a system for duplicating phugoid oscillation, or inherent stability, pioneered by Frasca over twenty years ago. In short, we've designed a system that gives you the kind of accuracy you need to maximize teaching potential.

Long-term flexibility . . .

One of the most impressive considerations about the New Generation Flight Computer is that it's designed for change.

Some people think this is the best part: the New Generation Flight Computer is designed for change. Which means that your Frasca can be modified to perform like almost any aircraft sold today . . . or tomorrow. As your fleet changes, so can your Frasca, an important point when you consider that Frasca flight simulators have a reputation for long life in the field.

So before you seriously think about any other kind of flight simulator, remember that Frasca gives you more than just a simulator . . . we give you a system.

Instructor's Console

The instructor's console is a four-panel design featuring a radio station control

Radio Station Control Panel

- Position null meter and selector
- Eight controls for station type (VOR, ADF, VORTAC)
- Eight pairs of controls for radio station position
- Eight radio station frequency selectors
- Two ILS selectors
- Two outer marker selectors
- Two middle marker range selectors
- Two sets of glide slope angle controls
- Field elevation control

Audio Panel

- Volume control
- Speaker on/off
- Push-to-talk button
- Microphone jack
- Headphone jack
- COMM 1/COMM 2 selector

Systems Panel

- Wind control up to 80 kts (infinitely variable direction)
- Barometric pressure control (sea level pressure 29.40" to 30.40")
- Failure controls:
  Instructor control of altitude and heading
  Total freeze or independent axis freeze
  Gross weight variations
  CG variations
  Marker beacon failure
  Glide slope failure
  NAV 1 & 2 failure
  ADF failure
  DME failure
  Pitot ice

Engine Panel

- Failure controls:
  Left engine failure
  Right engine failure
  Ammeter variations
  Cylinder head temperature variations left & right
  Oil pressure variation, left & right
  Fuel quantity variation, left & right
  Fuel pressure variation, left & right
  variations,

Ground Path Recorder

- X-Y plotter with site setting and instructor's controls
- Scale of 1" = 2.5 nm
- Plotting area of 60 x 85 nm

Optional Equipment

You can order your Frasca 122 with options. Special configurations, equipment, or performance characteristics are usually no problem. Here is a list of normal options to choose from:

- Altimeter measuring in milibars*
- Turn and slip indicator*
- Dual needle RMI
- Glide slope on NAV 2
- Collins PN-101 horizontal situation indicator
- Collins FD-112V flight director
- EGT indicators
- Fuel flow indicators
- Engine sound effects
- Turbocharged engines
- Spares and tool kit

*no extra cost

Power Requirements

110 V, 50 or 60 HZ, less than 5KVA (normally less than a desk-top copier).

Prices

Price schedules and other information available on request.

FRASCA
INTERNATIONAL INC.
606 S. NEIL ST. / CHAMPAIGN, IL 61820 / 217 359-3951